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DERWENT-WEEK: 200302

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TITLE: Method for manufacturing capacitor of semiconductor device

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APPLICATION-DATA:

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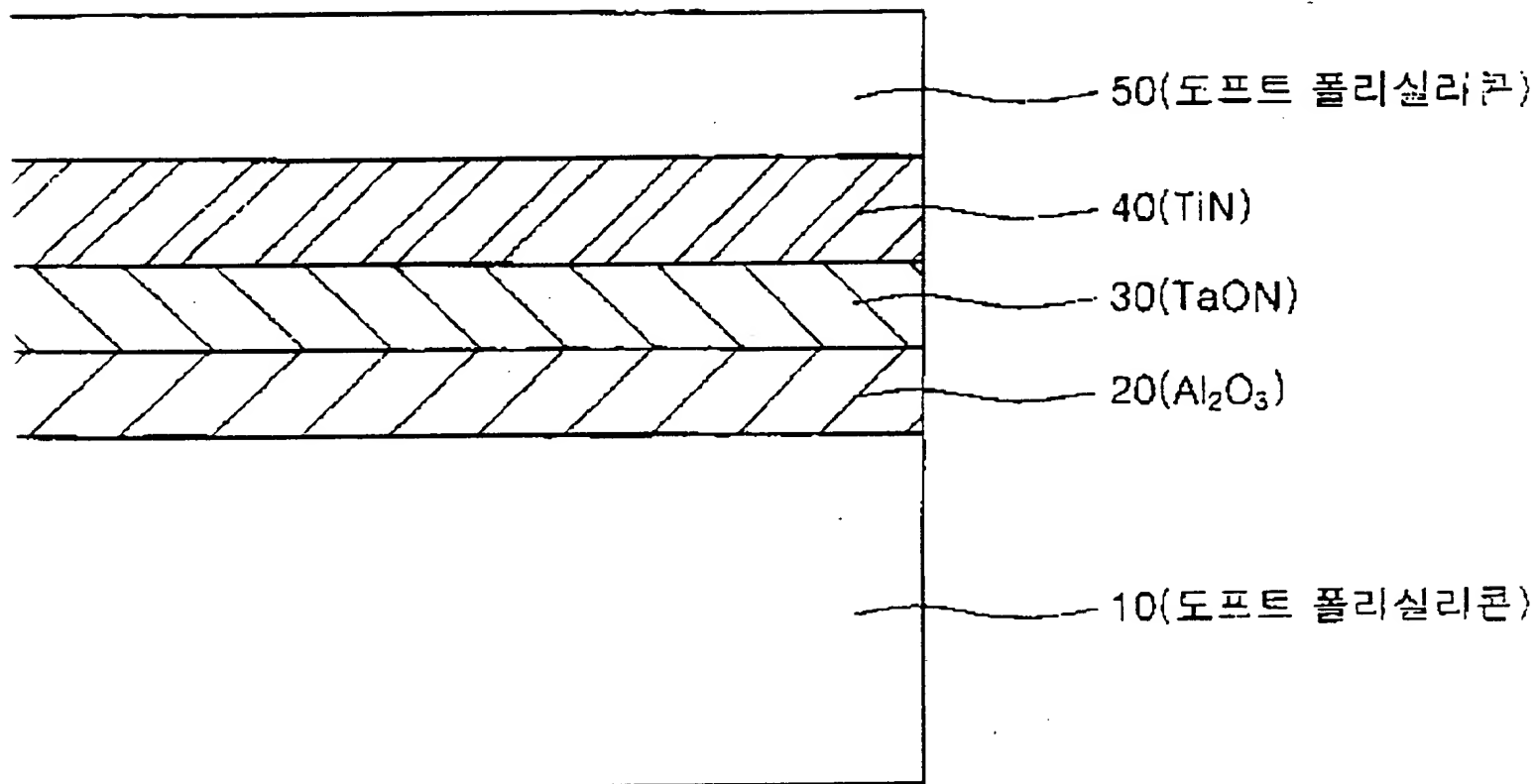
INT-CL (IPC): H01L021/8242

ABSTRACTED-PUB-NO: KR2002002157A

BASIC-ABSTRACT:

NOVELTY - A method for manufacturing a capacitor of a semiconductor device is provided to minimize impurities generated inside an evaporated layer as compared with a conventional metal organic chemical vapor deposition(MOCVD) method, by depositing an Al₂O₃ layer by an atomic layer deposition(ALD) method and by depositing a TaON layer by a plasma-type chemical vapor deposition(CVD) method for densification of a layer quality.

DETAILED DESCRIPTION - A lower electrode(10) made of a conductive material is formed. An Al₂O₃ layer(20) is evaporated on the lower electrode to form the first dielectric thin film by an ALD method. An annealing process is performed regarding the first dielectric thin film. The TaON layer(30) is deposited on the first dielectric thin film to form the second dielectric thin film by a plasma-type CVD method. An upper electrode(40,50) made of a conductive



material is formed on the second dielectric thin film.

CHOSEN-DRAWING: Dwg. 1/10

TITLE-TERMS: METHOD MANUFACTURE CAPACITOR SEMICONDUCTOR DEVICE

DERWENT-CLASS: L03 U11

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